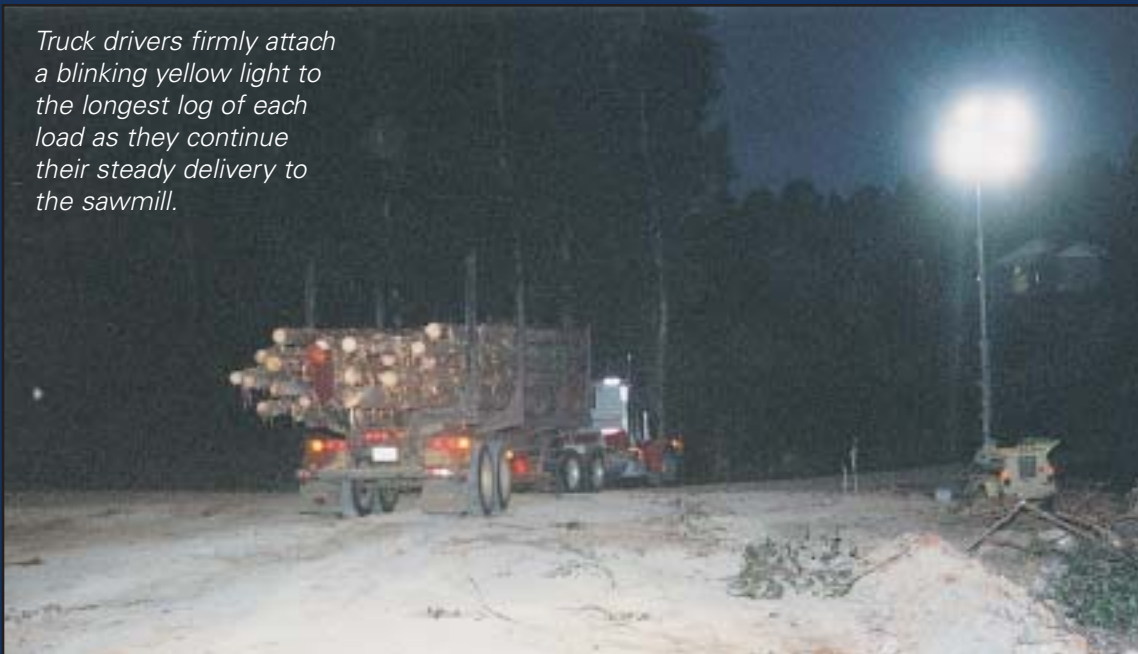


*Truck drivers firmly attach a blinking yellow light to the longest log of each load as they continue their steady delivery to the sawmill.*

Photo by Tilda Mims



# LOGGING UNDER THE NIGHT SKY:

## *Multi-Shifting*

## Comes to Alabama

*By Tilda Mims, AFC Retired*

**T**imber harvesting in Alabama, like logging in any other area of the country, is about more than just harvesting the forest these days. It is also about new harvesting methods, continuing education, sound environmental practices, and perhaps most important, sustainable forest resource management.

Add these concerns to cost controls, timely deliveries, and employee safety and it's easy to see some of the constant challenges facing logging contractors.

Responses to *Timber Harvesting* magazine's nationwide 2004 Logging Business Survey reported a "downsized and leaner logging force reeling from higher operating costs and poor profitability." More than 200 loggers from Alabama and 38 other states responded

to the study; one in four indicated their businesses lost money in 2003.

On the positive side, respondents were upbeat about their future in logging. A significant number indicated they plan to stay in business and pass it on to a son or daughter. While many reported diversification and cost-cutting strategies as coping measures, others are looking to a whole new way of logging to not just survive, but succeed.

Optimized logging, multi-shifting, double shifting, and night logging are terms to describe the practice of running a logging crew around the clock. Though typical in extremely cold climates where days are short and inclement weather is the norm, logging under bright lights is very new to Alabama.

Johnny and Michelle Kynard of Greensboro are good representatives of

the new type of logging contractors who are building their future on optimized logging. The Kynards are among the core contractors for Gulf States Paper Corporation. In 2003, Gulf States began exploring this new strategy in order to maintain a consistent wood flow for the Moundville Sawmill. They expanded the double-shift concept by using the term "optimized logging" to include maximized equipment utilization.

Rolfe Singleton, a harvest coordinator for Gulf States, was involved in the process from the start. "We offered the option of trying optimized logging to all of our core contractors and Johnny was immediately interested." They visited several sites to get a first-hand view.

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*Skidders are equipped with specially-designed lighting packages to increase illumination on all sides.*



Photos by Tilda Mims



Most new multi-shift operations in the South are running a 24/7 business with highly specialized cut-to-length equipment. Johnny says that when they came back to Alabama, he knew they could do it with his current equipment.

In late 2003, the Kynards started a second shift for a trial period using two trucks, one loader, and one skidder. According to Johnny, they tried cutting at night but it wasn't profitable or safe enough. So, they added a cutter to the day shift and concentrated on skidding, sorting, and loading during the second shift. "When we first started the trial period, it affected everyone's family life because we were learning as we went, but we never gave up," he says. "From a financial point of view, I had to do something. We worked only 221 days in 2002 due to weather and markets. I knew we had to try something new in order to keep the business going."

Optimized logging for the Kynards officially started January 1, 2004. From January 1 through July 2004, the crews missed only seven workdays.

*Operating two shifts increases demands for maintenance. Both operators and the mechanic look over all equipment before each shift. This attention to preventive maintenance keeps all equipment in excellent condition.*

operators, and five truck drivers – work second shift Monday through Thursday. Johnny is there from "can to can't" working with Gulf States and motivating the crew to maintain high production, quality, and safety.

The goal is to work nine shifts a week and be off on the weekend. If weather is a factor during the week, they may work weekends to make up lost time.

Operating two shifts increases demands for maintenance and safety measures, and attention to detail becomes more critical. Johnny contends maintenance is even better than before because there are three sets of eyes checking out equipment, two times a day. Both operators and the mechanic look over all

The full crew works days, Monday through Friday. Nine experienced employees – two skidder drivers, two loader

equipment before each shift. Between shifts, crews discuss work progress and layout, machine problems, and other shoptalk. This attention to preventive maintenance keeps all equipment in excellent condition.

The harvesting operation centers on an on-site service truck. It is a well-equipped workshop and parts storage facility with hoses, fuels, hydraulic hose machine, welder, bolts bins, and many specialized tools. There are three mechanics in the crew and at least one mechanic available on each shift.

When computerized equipment needs repair however, they have to rely on specially-trained technicians. "We have a great working relationship with Warrior Tractor Company in Northport," Johnny points out. "I talked to them early in this process to make sure we would have the backing we needed to operate nights. We've had a mechanic down here at 2:30 in the morning to work on the computer in a piece of equipment." Reliable



Photos by Tilda Mims



mechanic support is critical to their success. "They help us get back to work," he said.

The equipment shows only normal wear and tear for the number of hours the equipment is operating. It will wear out faster, of course, but that isn't a problem because they are just as productive at night as in the day.

Safety is a concern on every logging site, but when visibility is limited, risks require more attention. Careful tract selection is the key. Rolfe says that not all tracts are suitable for optimized logging. "Steep terrain and old-growth timber requires people on the ground and that is not safe at night."

Once the site is approved for optimized logging, a Gulf States crew marks property lines and streamside management zones, and determines needed Best Management Practices. The day shift cuts and skids timber around edges of the tract to clearly mark lines for the night crew. Boundary lines cut during the day let the night crew know exactly where to



Photo by Tilda Mims

(L to R) Rolf Singleton and Johnny Kinard work together almost daily to ensure the productivity of the optimized logging operation.

begin and end. Extra set-up work performed by the day shift allows the 4:00 p.m. crew to continue the pace.

As the sun begins to set, the rhythm of the machines halts briefly while the crew prepares for a night's work under a starry sky. Poles of high-powered halogen bulbs are raised high, casting 8,000 watts of additional light over the entire work site. All personnel slide on reflective

vests and lighted hardhats, and skidders flip on specially designed lighting packages. Lighted roadway signs begin to glow in warning to passing drivers. Truck drivers firmly attach a blinking yellow light to the longest log of each load as they continue their steady delivery to the sawmill. One substantial advantage is quicker turn-around time at the sawmill. Night deliveries virtually eliminate waiting time, which is often 30-40 minutes during the day shift.

Casual observers in pick-up trucks often pull onto the side of the red dirt road, watching in fascination as the crew quickly resumes a steady pace of skidding, sorting, and loading.

Merchandising is the separation of species and products for loading on trucks. Lighting allows the experienced

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*Lighting allows the experienced night loader/operator to be as accurate as the day operator.*



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*Left: Three cutters work the day shift to ensure sufficient logs for the night crew.*

*Below: The day shift cuts and skids timber around edges of the tract to clearly mark lines for the night crew.*

night loader-operator to be as accurate as the day operator.

An unexpected benefit is the ability of the skidder operator to pick out the smallest logs in his path. When working at night, skidder operators have very few distractions, with less interference from outside factors. This allows them to become more focused on wood nearest the skidder, bringing along every usable piece.

Safety Rule #1 is: **No worker on the ground when equipment is running.** Time spent in machines minimizes exposure to on-ground hazards. So, when an empty truck pulls up, the loader operator shuts down until he is certain of the driver's location and they have a chance to talk. When a skidder operator has to leave his equipment, others halt until he is back on the machine. Good coordination and full communication between all employees keeps everyone on their toes.

Experienced, capable employees are critical for the success of this new method of logging. Kynard says he has had no trouble attracting and retaining good employees. All crewmembers are trained in Best Management Practices and have attended Professional Logging Manager training. Experienced people came on board knowing it was for the night shift, he said. One big reason for its success is that it gives crews quality time at home with their families. They have a steady paycheck and their weekends are free.

Rolfe says the new process is providing a steady source of wood for the mill. Just a few years ago, he was juggling 17-18 different contractors. Today, he works



*Photos by Tilda Mims*

with only two, and both are optimizing. "It takes a lot of commitment and dedication to be successful in this," he said. "It has been a win-win situation for us."

Customer service is important in any business. For the private landowner, Johnny sees several reasons why a timber seller might like the idea of an optimized logging operation on his or her property, and all result from reduced time spent on the tract. A harvesting that might take three weeks in the standard system should take no more than one-half the time under normal conditions. This flexibility may offer landowners more freedom to plan timber harvests around nesting season, hunting parties, rainy season, and other special conditions to receive top dollar for their timber investment.

In addition, the seller can take full advantage of timber markets. If the market is good, the number of loads delivered at the better price could easily double.

Johnny and Michelle are confident this is a positive change for employee

morale and the bottom line as well. "We will never go back," Johnny says. "For us to survive as contractors, we had to be flexible and try something new. Optimized logging has been a good fit for us."

The double-shift approach to logging has attracted a lot of attention in its brief life in the South. It has been touted as a way to cut costs, become more efficient and productive, and help the U.S. compete in a tough global market. While some veteran loggers are reluctant to change, several Alabama loggers are watching the Kynards and others with optimism. 🌲

## RESOURCES:

*Southern Loggin' Times,*  
June 2004

*Logging and Sawmilling Journal,*  
December 2003 and January 2004

*Timber Harvesting,*  
May/June 2004